



The Effect of Deep Breathing Relaxation Techniques on Intensity Mother's Pain in Labor the Initial Phase of Contractions in Midwifery Practice

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ABSTRACT

Deep breathing relaxation therapy is a breathing in the abdomen with a slow frequency and slowly, rhythmically, and comfortably by closing the eyes while breathing. The purpose of this study was to determine the effect of deep breathing relaxation techniques on the intensity of pain in mothers in labor at the Midwife Practice. Pre-experimental design method. The population in this study were mothers giving birth at the Midwife Practice. Purposive sampling technique. The analysis used was univariate and bivariate analysis using the Wilcoxon test. The results of the study showed that before the deep breathing relaxation technique was carried out, there were 73.3% who had moderate pain and 26.7% who had severe pain and after the deep breathing relaxation technique was carried out, there was mild pain 80%. % and moderate pain 20%. The results showed that there was an influence of deep breathing relaxation techniques on the intensity of pain in mothers giving birth, which was seen from the results of the post-test, the level of labor pain decreased. The conclusion of the study was that there was an influence of deep breathing relaxation techniques on the intensity of pain in mothers giving birth at the Midwife Practice. It is expected that midwives will play an active role in providing the use of deep breathing relaxation methods during labor to reduce the level of labor pain so as to improve services for patients.

Keyword: Benefits, Combination, Breast Care, Oxytocin Massage, Breast Milk Production, Postpartum Mother Partum

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1. Introduction

Deep breathing relaxation therapy can be done independently, is relatively easy to do compared to other non-pharmacological therapies, does not require a long time for therapy, and can reduce the negative impacts of pharmacological therapy for hypertension sufferers (Masnina & Setyawan, 2018).

The effect of this therapy is distraction or diversion of attention. (Hartanti, et al., 2016). The mechanism of deep breathing relaxation in the respiratory system is in the form of a state of inspiration and expiration of breathing with a breathing frequency of 6-10 times per minute so that there is an increase in cardiopulmonary strain.

Childbirth is the process of expelling the results of conception of a fetus or placenta that has reached term or lives outside the womb through the birth canal or through other means, with or without assistance. The process of childbirth is identical to the pain that will be experienced, physiologically pain occurs when the muscles of the uterus contract in an effort to open the cervix and push the baby's head towards the pelvis. During the first stage of normal labor, pain can be caused by involuntary contractions of the uterine muscles. Contractions tend to be felt in the lower back at the beginning of labor. A sensation of pain circling the lower torso including the abdomen and back as labor progresses, the intensity of each contraction increases, resulting in greater intensity of pain.

Based on research in the United States, 80% of women who give birth expect labor to be painless. Various methods are used so that mothers giving birth do not always feel pain and feel comfortable. Currently, up to 50% of deliveries in private hospitals in Indonesia are carried out by caesarean section, the high caesarean section is caused by mothers who are about to give birth preferring relatively painless operations. Handling and monitoring labor pain, especially in the first stage, is very important, because it is the determining point whether a mother giving birth can undergo normal labor or end with an action due to complications caused by very severe pain. Interventions to reduce





discomfort or pain during labor include pharmacological and non-pharmacological interventions.

Labor pain can be reduced/relieved by various methods, namely increasing the mother's knowledge about things that will happen during labor, increasing self-confidence and breathing relaxation. Breathing relaxation techniques are pain relief techniques that provide the greatest input because relaxation techniques in labor can prevent excessive errors in the labor process. Breathing and relaxation are considered very helpful techniques for controlling pain completely.

The study showed a difference before being given the deep breathing relaxation technique, namely 11 people (36.7%) experienced moderate pain and 19 people (63.3%) experienced severe pain and after being given the deep breathing relaxation technique there was a change, namely 11 people (36.7%) experienced mild pain, 15 people (50.00%) experienced moderate pain and 4 people (13.3%) experienced severe pain.

Research conducted by Nurfitri (2016) showed that there was a difference in pain intensity in mothers in the first active phase of labor before and after performing breathing relaxation techniques with the results of the study obtained, before performing the relaxation technique most respondents experienced moderate pain, namely 8 respondents with a percentage of 47.1%, severe pain, namely 8 respondents with a percentage of 47.1% and very severe pain, namely 1 respondent with a percentage of 5.8% and after performing the breathing relaxation technique respondents experienced a mild pain scale, namely 6 respondents with a percentage of 35.3%, a moderate pain scale, namely 8 respondents with a percentage of 47.1%, a severe pain scale, 2 respondents with a percentage of 11.8% and very severe pain, namely 1 respondent with a percentage of 5.9%.

Deep breathing relaxation technique is one way to reduce pain in mothers in labor non-pharmacologically by taking a deep breath during contractions through the nose while inflating the stomach and exhaling through the mouth slowly while deflating the stomach. Relaxation techniques can be done to control maternal pain by minimizing sympathetic nerve activity in the autonomic nervous system. The technique can reduce





the sensation of pain and control the intensity of the mother's reaction to pain. The hormones adrenaline and cortisol that cause mothers to be anxious and afraid will decrease, the mother can increase concentration and feel calm so that it is easier for the mother to regulate her breathing.

Based on data collection on the number of mothers who will give birth, the increasing number of deliveries means that the responsibility of a midwife in health service facilities is getting heavier. The task of a midwife is to provide physical and psychological care that is oriented towards the body during the labor process, one of which is to fulfill the basic needs of the mother during the first stage of labor, especially the approach to reducing pain, namely by teaching the mother relaxation techniques and helping the mother to practice breathing.

2. Research Methods

Purposive sampling technique. The analysis used was univariate and bivariate analysis using the Wilcoxon test. Purposive sampling technique where samples are taken based on characteristics determined by the researcher himself. The sample criteria used were the inclusion criteria for mothers who did not use pharmacological methods to reduce pain. Multigravida labor status.

The researcher taught and asked the respondents to assess the pain felt during the first uterine contraction using the Numeric Rating Scale observation sheet with the determination of the level of pain based on mild pain, moderate pain, severe pain, and the most severe pain. The researcher taught the respondents how to regulate their breathing patterns with deep breathing relaxation techniques by inhaling through the nose while inflating the stomach and exhaling slowly through the mouth. Entering the active phase, the respondents applied the deep breathing relaxation technique taught by the researcher. Respondents re-evaluated the pain felt during the second and third His by indicating the pain scale on the Numeric Rating Scale sheet. Analysis using the Wilcoxon Signed Rank Test.

3. Results and Discussion

a. Results





Table 1.
Influence Technique Relaxation Breath in Against
Pain Intensity Mother Giving Birth in Practice Midwife

			p-value
1. After Technique Relaxation	Negative Ranks	15a	0,000
	Positive Ranks	0b	
2. Before Technique Relaxation	Ties	0c	
	Total	15	

Based on table 1 can known Respondent Which experience decline painful namely 15 respondents. The results of the Wilcoxon test value p -value 0,000 If compared to with $\alpha=0.05$, so mark the show P value $< \alpha$, so it can be concluded that H_a accepted And H_0 rejected. Matter the shows that there is an influence of technique deep breathing relaxation against pain intensity in the mother who is seen giving birth from results post test level painful labor decrease.

b. Discussion

Based on table 1, it shows a decrease in pain after deep breathing relaxation techniques were performed on respondents. Based on the results of observations before being given deep breathing relaxation techniques, there were 11 mothers giving birth (73.3%) who had moderate pain and 4 mothers giving birth (26.7%) who had severe pain and after deep breathing relaxation techniques were performed, there were 12 mothers giving birth (80%) who had mild pain and 3 mothers giving birth (20%) who had moderate pain.

The researcher's assumption is that this affects the perception of pain and the mother's ability to control herself regarding the labor process, mothers who have not been able to control the pain felt during the labor process will find it difficult to control the pain felt related to the absence of pain management obtained, namely deep breathing relaxation techniques. Cervical dilation also affects the intensity of pain felt, the greater the intensity of pain followed by the cervical dilation process, the greater the pain felt. The anxiety felt by the mother begins to enter the active phase.





This can be seen from the facial expressions when the researcher conducted observations, the respondents appeared to hiss so that it affected the intensity of pain during labor.

Labor pain as myometrial contractions, is a physiological process with different intensities in each individual. Pain increases when the cervix is fully dilated due to the pressure of the baby on the pelvic structure followed by stretching and tearing of the birth canal. Labor pain is considered normal, but they do not have experience on how to reduce pain such as deep breathing relaxation techniques. so researchers are interested in teaching deep breathing relaxation techniques to reduce labor pain.

Ability to apply deep breathing relaxation techniques and midwives providing positive suggestions to divert respondent's attention, thus helping respondents overcome anxiety and reducing pain intensity so that respondents become more relaxed in facing labor. This is reinforced by maryunani's theory (2010). This deep breathing relaxation technique is a non-pharmacological method of pain relief. In principle, this deep breathing relaxation technique can reduce tension in mothers that causes stress during labor pain. By carrying out this deep breathing relaxation technique, pain can be controlled by minimizing sympathetic nerve activity in the autonomic nervous system. This technique can reduce the sensation of pain and control the intensity of the mother's reaction to pain. The hormones adrenaline and cortisol that cause stress will decrease, the mother can increase concentration and feel calm so that it is easier for the mother to regulate her breathing.

Based on the results of the Wilcoxon test, the p value is = 0.000 when compared to $\alpha = 0.05$, then the value shows p value $< \alpha$, so it can be concluded that H_a is accepted and H_0 is rejected. This shows that there is an effect of deep breathing relaxation techniques on the intensity of pain in mothers giving birth at the Midwife Practice.

The results of this study are also supported by Ghofur's research in (2010) on mothers giving birth in the first stage with the results that deep breathing relaxation





techniques are effective in reducing pain during the labor process. Likewise, research conducted by Fatmawati in 2011 (11) on normal labor patients with the results that the intensity of pain before being given breathing relaxation techniques was on average severe pain and after being given breathing relaxation techniques the average pain was mild.

In accordance with the research results, deep breathing relaxation techniques for labor pain in the first active phase in mothers giving birth can reduce labor pain in mothers giving birth, this is proven based on a decrease in post-test results. Therefore, deep breathing relaxation techniques can be used as an intervention in midwifery care for mothers in the first stage of labor to reduce labor.

4. Conclusion

The conclusion of the study is that there is an influence of deep breathing relaxation techniques on the intensity of pain in mothers during labor in Midwife Practice. It is expected that midwives will play an active role in providing the use of deep breathing relaxation methods during labor to reduce the level of labor pain so as to improve services for patients.

5. Compliance with ethical standards

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Disclosure of conflict of interest

This research collaboration is a positive thing for all researchers so that conflicts, problems and others are absolutely no problem for all writers.

Statement of informed consent

Every action we take as authors is a mutual agreement or consent.

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